

A NOTE ON THE NESTING HABITS OF *POMPILUS*  
(*AMMOSPHEX*) *OCCIDENTALIS* (DREISBACH)

(Hymenoptera: Pompilidae)

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On August 5, 1956, a single female of *Pompilus occidentalis* (Dreischbach)<sup>1</sup> was observed occupied in its nesting activities in Calaveras County, California. The locality, about two miles south of Big Meadows, is in the basin of the north fork of the Stanislaus River at an approximate elevation of 6500 feet. The composition of the valley floor in this region consists principally of a pine forest with very little undergrowth.

At approximately 1:55 P.M. Pacific Daylight Saving Time, in a dry wash sparsely shaded by pines, the wasp was first seen with its prey. The spider has subsequently been determined as *Pardosa* sp. (Lycosidae) by Dr. Willis J. Gertsch of the Department of Insects and Spiders, American Museum of Natural History. The wasp was walking backward, dragging the spider by one of its legs. Shortly thereafter the prey was placed about one centimeter above the ground, lodged in a small tuft of grass, and abandoned. The wasp then began to fly quickly about the immediate vicinity, staying close to the bare, sandy soil, and alighting frequently to move short distances among the numerous pebbles and small rocks. This behavior continued for about six minutes, during which the wasp made several irregular circles around the position of the immobile spider. At length a spot some 39 cm. from the prey was selected, and the female wasp quickly cleared the twigs, needles and pebbles from a small area adjoining a short stick.

At 2:02 P.M. the female began to dig, worked rapidly, and then did not leave the deepening hole, except to bring up dirt occasionally. This activity lasted 18 minutes. Periods of digging were interspersed with those of rapid raking, the wasp backing out of its burrow and scraping the loose material from the tunnel entrance with its front legs. Finally she came up, went immediately to the spider and hurriedly dragged it to the excavation site. After placing it about three centimeters from the hole, the wasp proceeded to inspect the entrance before bringing the prey to the burrow. There, once again the paralyzed Arachnid was abandoned;

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<sup>1</sup> Determination by Marius S. Washbauer, Department of Entomology, University of California, Berkeley.

this time while the female disappeared into the tunnel for a few seconds. At 2:22 the wasp backed down the burrow again, this time dragging the spider in. Three minutes later the busy Pompilid reappeared, pulling the loose sand left about the entrance into the hole. She then continued to replace and pack the soil until the tunnel was filled completely. Following this, nearby pine needle fragments and pebbles were kicked over the excavation area until no trace of the digging activity was in evidence. At 2:28 P.M. as this process appeared finished, the wasp was captured.

Upon a digging inspection, the tunnel was found to be 20 mm. in length, slanting into the soil at approximately a 45 degree angle. At the base of the completely packed entrance was a loose, oval cell, 8 mm. in length, which contained the spider. The spider was situated in the cell in a ventral side down, head in first position. A smooth, white, elongate egg of 2 mm. in length had been placed diagonally in a lower, lateral position near the middle of the prey's abdomen. The spider was kept alive for about eight hours without showing any signs of reviving, after which it was placed in alcohol.

It is interesting to note that as far as is known there are no previous reports on the nesting habits of any of the members of the subgenus *Ammosphex* in North America. Prey associations, however, have been listed by Evans<sup>2</sup> for *P. Ammosphex solonus solonus* (Banks), collected with a *Lycosa* sp. and *P. Ammosphex michiganensis dakota* (Dreisbach), pinned with a *Thanatus formicinus* (Oliver).

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<sup>2</sup> Evans, Howard E., 1951. A Taxonomic study of the nearctic spider wasps belonging to the tribe Pompilini (Hymenoptera:Pomoiidae) Part III. Trans. Amer. Ent. Soc. 77:203-304.

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#### ZOOLOGICAL NOMENCLATURE: NOTICE OF PROPOSED USE OF THE PLENARY POWERS IN CERTAIN CASES FOR THE AVOIDANCE OF CONFUSION AND THE VALIDATION OF CURRENT NOMENCLATORIAL PRACTICE (A.(N.S.) 34)

Notice is hereby given that the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers is involved in applications relating to the under-mentioned names included in Part 1 of Volume 13 of the *Bulletin of Zoological Nomenclature*, which will be published on 25th January, 1957:

- (1) *Bithys* and *Chrysophanus* Hübner, 1818 (generic names of neotropical Theclids), suppression of (Class Insecta, Order Lepidoptera) (Z.N.[S.]802);